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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/789,330

02/26/2004

Sung-Ki Jung

ABS-1460 US

9372

32605

7590

05/01/2008

MACPHERSON KWOK CHEN & HEID LLP

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SUITE 400

SAN JOSE, CA 95110

EXAMINER

TADESSE, YEWEBDAR T

ART UNIT

PAPER NUMBER

1792

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/789,330	<b>Applicant(s)</b> JUNG ET AL.	
	<b>Examiner</b> YEWEBDAR T. TADESSE	<b>Art Unit</b> 1792	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 is/are allowed.
- 6) ☒ Claim(s) 22-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The indicated allowability of claim 24 is withdrawn in view of the newly discovered reference(s) to Kitano et al (US 2001/0003966 A1). Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 22-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Kitano et al (US 2001/0003966 A1).

As to claims 22 and 25-26, Kitano et al discloses (see Fig s, 16b, 17 and 18b paragraph) a cleaning unit for cleaning a slit coater (nozzle 85 with port 94) for coating a substrate with a material, the cleaning unit comprising: a body (205) including an upper face, the upper face having a receiving recession (see Figures) for receiving a slit nozzle of the coater, the receiving recession having a sidewall and a bottom face, the sidewall having injection holes (see Figs 18b), a cleaning material and gas being sprayed via these injection holes; and a cleaning member (plate 95) capable of eliminating dregs of material attached on the slit nozzle of the slit coater, wherein the cleaning member (95) covering the bottom face of the receiving recession (see item 94 covering the space T having sidewalls and bottom face, see Fig 17) wherein the

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cleaning member makes contact with an end portion of the slit nozzle of the slit coater during cleaning.

As to claim 23, in Kitano et al the cleaning member is made of an elastic material (see paragraph 73)

With respect to claim 24, in Kitano et al the cleaning member (95) is detachably (removably) attached on the bottom surface (see paragraph 91).

4. Claims 22, 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamiya (US 5,772,764).

As to claim 22, Kamiya discloses (see Figs 1-4) a cleaning unit (13) for cleaning a slit coater (nozzle 15) for coating a substrate with a material, the cleaning unit comprising: a body including an upper face, the upper face having a receiving recession (see Fig 2) for receiving a slit nozzle of the coater, the receiving recession (29) having a sidewall and a bottom face (see Fig 2), the sidewall having a first injection hole (tube 27, 26), a cleaning material being sprayed via the first injection hole; and a cleaning member (21) capable of eliminating dregs of material attached on the slit nozzle of the slit coater, wherein the cleaning member (21) covering the bottom face of the receiving recession (item 21 covers the interior faces of cleaning unit 13), wherein the cleaning member makes contact with an end portion (top end portion connected to the pipe 20) of the slit nozzle of the slit coater during cleaning.

As to claims 25-26, Kamiya discloses a side wall having a second injection hole for spraying gas (N<sub>2</sub>) capable of being used to dry the slit nozzle.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hasebe et al (US 5,374,312) in view of Park et al (US 6,019,843).

Hasebe et al lacks teaching a cleaning member comprising rubber material or polytetrafluoroethylene. However, the use of cleaning member having a container made of rubber is well known in the art; for instance Park et al discloses such feature (see column 2, line 67-column 3, and line 2). It would have been obvious to one of ordinary

skill in the art at the time the invention was made to include cleaning member comprising rubber material in Hasebe et al to prevent corrosion.

***Allowable Subject Matter***

8. Claims 1-9 are allowed.
9. The following is a statement of reasons for the indication of allowable subject matter: claims 1-9 are allowed for the same reasons described on the action dated 11/16/2007.

***Response to Arguments***

10. Applicant's arguments filed 02/14/2008 have been fully considered but they are not persuasive.
11. Applicants argue that in Kamiya the annular ring 21 is formed on the side of the nozzle and does not cover the bottom face of the receiving recession. Examiner respectfully disagrees. First, applicants' claim 1 requires a cleaning member attached on the slit nozzle, as shown in Fig 2 item 21 is attached to the slit nozzle (15). Furthermore, in Kamiya the annual ring does not prevent the cleaning unit from being covered. Actually, the cleaning member (21) does support (see Fig 2) the internal space of the cleaning unit (13) to be covered (the unit having sidewalls and bottom face).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YEWEBDAR T. TADESSE whose telephone number is

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(571)272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yewebdar T Tadesse/  
Primary Examiner, Art Unit 1792